

EVC-1 Update David Considine EVC-1 Program Scientist

CERES Science Team Meeting 5/7/2019

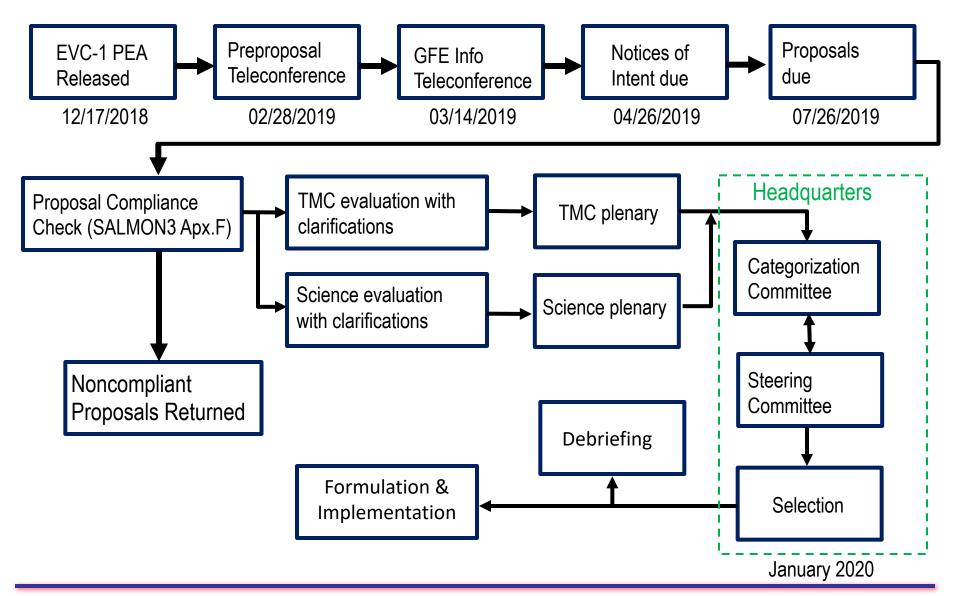


Overview of EVC-1 PEA

- EVC-1 PEA is Appendix N of the 3rd Stand Alone Missions of Opportunity Notice (SALMON-3) Announcement of Opportunity.
 - Read both SALMON-3 and the PEA follow requirements in both.
 - PEA clarifies and extends SALMON-3 AO requirements.
- Focused on maintaining continuity of NASA Earth Radiation Budget climate data records.
 - Follows cancellation of the Radiation Budget Instrument, which was intended to provide this continuity.
 - Some EVC-1 characteristics differ from general EVC due to ERB focus.
 - Earth Radiation Budget continuity is recommended in 2017 DS.
- PI can propose full mission, specify a host of their choice, or propose to fly on a JPSS platform.
 - JPSS has an appropriate spot, this option would follow model of CERES FM-6 accommodation on JPSS-1 (now NOAA-20) platform and planned accommodation of RBI on JPSS-2.
- PIMMC: \$150 million (2019\$\$) cost cap, ESD will cover accommodation or launch costs outside of PIMMC.
- One-step solicitation process, 1 selection is anticipated.
- RBI hardware, etc. offered as GFE.



EVC-1 Proposal Evaluation And Selection Flow Chart





Evaluation Criteria and Clarifications

Evaluation Process is described in Section 7 of the SALMON-3 AO

Evaluation criteria weighting changed from Section 7.2 of SALMON-3 AO:

- Science Intrinsic Merit reduced from 40% to 30%
- Science Implementation Merit increased from 30% to 40%
- Technical, Management and Cost same at 30%

Clarifications:

- As discussed in Section 7.1 of the SALMON-3 PEA, NASA may request clarification of specific points in a proposal.
- Clarifications are related to identification of potential major weaknesses in proposal
- Request and response will be in writing.
- Response to clarification request is limited.

Proposals are evaluated against criteria and not each other



Science Panel Intrinsic Merit Evaluation Factors (30%)

- Factor A-1. Compelling nature and priority of the proposed investigation's science goals and objectives.
- Factor A-2. Programmatic value of the proposed investigation.
- Factor A-3. Likelihood of science success.
- Factor A-4. Science, exploration, or technology value of the threshold investigation.



Science Panel Implementation Merit Evaluation Factors (40%)

Factor B-1. Merit of the instruments and investigation design for addressing the science goals and objectives.

Factor B-2. Probability of technical success.

Factor B-3. Merit of the data analysis, data availability, and data archiving plan and/or sample analysis plan.

Factor B-4. Science resiliency.

Factor B-5. Probability of investigation team success.



EVC-1 TMC Feasibility of the Proposed Investigation Implementation (30%)

Factor C-1. Adequacy and robustness of the instrument implementation plan.

Factor C-2. Adequacy and robustness of the investigation design and plan for operations.

Factor C-3. Adequacy and robustness of the flight systems.

Factor C-4. Adequacy and robustness of the management approach and schedule, including the capability of the management team.

Factor C-5. Adequacy and robustness of the cost plan, including cost feasibility and cost risk.





EVC-1 Specific Science and TMC Evaluation Factors

Factor B-8. Merit of the calibration capabilities and calibration plan.

Factor B-9. EVC specific factor.

This factor includes consideration of innovations in design that facilitate maintaining continuity of the ERB, of design features that facilitate the accommodation of a proposed instrument on either the proposed platform or a JPSS platform as appropriate, of features (such as reliance on easily available components) enhancing the producibility of the instrument and future copies, and of design features which would facilitate capability-enhancing technology infusion in future copies.

Factor C-6. (Technical, Management and Cost Feasibility of the Proposed Investigation Implementation) includes an additional evaluation factor.

This factor includes consideration of innovations in design or processes that reduce cost, of the potential cost of future copies of the proposed observing system that will be necessary to maintain measurement continuity in the future, of the design features that facilitate the accommodation of a proposed instrument on either the proposed platform or a JPSS platform as appropriate, of features (such as reliance on easily available components) enhancing the producibility of the instrument and possible future copies, and of design features which would facilitate cost-reducing or capability-enhancing technology infusion in future copies.



Questions and Comments

All questions pertaining to the EVC-1 PEA MUST be addressed to:

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Preferably by email at:

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Subject line to read "EVC-1 PEA Question"